



# **Ceiling Cassette Air Conditioner**

## **SVC MANUAL(Exploded View)**

**MODEL : LT-H488DLE1**

### **CAUTION**

Before Servicing the unit, read the safety precautions in General SVC manual.  
Only for authorized service personnel.

# 1. Specification

## Indoor

Indoor Unit Type			Ceiling Cassette
Models			LTNH488DLE1
Decorative Panel Model			PT-HDA1
Power Supply	Ø / V / Hz		3/380~415/50
Cooling Capacity	kW		14
	Btu/h		47,770
Heating Capacity	kW		15.2
	Btu/h		51,865
Current	Nominal Running Current	A	0.4
Fan	Motor Type		BLDC
	Fan Type		Turbo
	Motor Output(W) x No. of Unit		124*1
	Air Flow Rate (H / M / L)	CMM	31/29/27
		cfm	1094/1024/953
	External Static Pressure		-
	Capacitor	µF / Vac	680/400
	Drive		Direct
Coil	Row x Column x FPI		2R*12C*19FPI
Dimensions (W x H x D)	Body	mm(inch)	840*840*288(33.1*33.1*11.3)
	Decorative Panel	mm(inch)	950*950*30(37.4*37.4*1.2)
Net Weight	Body	kg (lbs)	31/68.3)
	Decorative Panel	kg (lbs)	5(11)
Air Filter			Long Life Filter
Sound Level (H / M / L / SL)		dB(A)+3	45/44/42/41
Piping	Liquid	mm (inch)	9.52(3/8)
Connections	Gas	mm (inch)	19.05(3/4)
	Drain(OD/ID)	mm	32/25
Dehumidification Rate		l/h	2.4
Safety Devices			Fuse, Thermal Protector
Temperature Sensor			Thermistor
Refrigerant			R22
Refrigerant Control			Capillary Tube
Connectable Outdoor Unit			LTUH488DLE1
Power and Transmission Interunit Cable		No. x mm <sup>2</sup>	5* 3.5 ( 5* 0.75)

### Note:

1. Capacities are based on the following conditions:

- Cooling: - Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB  
 - Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F) WB  
 Heating: - Indoor Temperature 20°C(68°F) DB/15°C(59°F) WB  
 - Outdoor Temperature 7°C(44.6°F) DB/6°C(42.8°F) WB  
 Piping Length - Interconnecting Piping Length 7.5m  
 - Level Difference of Zero

2. Wiring cable size must comply with the applicable local and national code.

3. The specification may be subject to change without prior notice for purpose of improvement.

### Conversion Formula

$$\text{kW} = \text{Btu/h} \times 0.0002931$$

$$\text{cfm} = \text{CMM} \times 35.3$$

## 2 Ceiling Cassette Air Conditioner

## Outdoor

Outdoor Unit			LTUH488DLE1
Nominal Capacity (Min~Rating~Max)	Cooling	kW	14
		Btu/h	47,770
	Heating	kW	15.2
		Btu/h	51,865
Nominal Input (Min~Rating~Max)	Cooling	kW	4.9
	Heating	kW	4.9
Testing Combination			-
Running Current(Rating)	Cooling	A	8.5
	Heating	A	8.7
Starting Current	Cooling/Heating	A	-
Power Supply			Ø / V / Hz
Power Supply Cable(Outdoor)			3/380-415/50
Power and Transmission Cable (Outdoor to Indoor or Outdoor to BD)			No. x mm <sup>2</sup>
Power and Transmission Cable(BD to Indoor)			5*3.5(Including Earth)
Dimensions			5*0.75(Including Earth)
Net Weight			-
Max. Number of Connectable Indoor Units			1130*900*370 (44.5 *35.4*14.5)
Compressor (#1)			105(231)
Compressor (#1)	Type		1
	Qty x Model		SCROLL
	Motor type		1 * SB061YAA
	Oil charge volume	cc	Induction
	Oil Type		1,650
Compressor (#2)	Type		SUNISO 4GSI
	Qty x Model		-
	Motor type		-
	Oil charge volume	cc	-
	Oil type		-
Compressor (#3)	Type		-
	Qty x Model		-
	Motor type		-
	Oil charge volume	cc	-
	Oil type		-
Refrigerant	Cycle A Charge (at 7.5m)	g(oz)	3,700(130.5)
	Cycle B Charge (at 7.5m)	g(oz)	-
	Type		R22
	Control		Capillary Tube
Additional Refrigerant Charge			g/m(oz/ft)
Heat Exchanger	(Rows x Column x FPI) x No.		45(0.48)
	Defrosting Method		(2R*22C*18FPI)*2
Fan	Capacitor	µF/Vac	Reversing Cycle
	Drive		6/370-400
	Discharge Direction(Side/Top)		Direct
	Air Flow Rate x No. of Fan	CMM(cfm)	Side
Sound Level(H/L)	Sound Pressure	dB(A)+3	110(3885)
Piping Connections	Liquid(Cycle A)	mm(inch)	59
	Gas(Cycle A)	mm(inch)	9.52(3/8)
	Liquid(Cycle B)	mm(inch)	19.05(3/4)
	Gas(Cycle B)	mm(inch)	-
	High Pressure Gas	mm(inch)	-
Max. Interunit Piping Length	Total Piping	m	50
	Main Piping	m	-
	Total Branch Piping	m	-
	Each Branch Piping	m	-
Max. Elevation Difference	Outdoor Unit~Indoor Unit	m	30
	Indoor Unit~Indoor Unit	m	-
Operation Range (Outdoor)	Cooling	°C(°F)	21~54
	Heating	°C(°F)	-7~24

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Conversion Formula
kW = Btu/h x 0.0002931
cfm = CMM x 35.3

## 2. List of Functions

### Indoor

Category	Function	LTNH488DLE1
Air flow	Air Supply Outlet	4
	Airflow Direction Control (left & right)	-
	Airflow Direction Control (up & down)	Auto
	Auto Swing (left & right)	X
	Auto Swing (up & down)	O
	Airflow Steps(Fan / Cool / Heat)	4/5/4
	CHAOS Swing	X
	CHAOS Wind (Auto wind)	O
	Jet Cool (Power Wind)	O
	Swirl Wind	O
Air Purifier	Deodorizing Filter	X
	Plasma Air Purifier	OPTION
	Prefilter(Washable / Anti-Fungus)	O
Installation	Drain Pump	O
	E.S.P. Control	-
	Electric Heater(Operation)	-
	High Ceiling Operation	O
Reliability	Hot Start	O
	Self Diagnosis	O
	Soft Dry Operation	O
Convenience	Auto Changeover	O
	Auto Cleaning	X
	Auto Operation (Artificial Intelligence)	O
	Auto Restart Operation	O
	Child Lock	O
	Forced Operation	O
	Group Control	O
	Sleep Mode	O
	Timer (On/Off)	O
	Timer (weekly)	O
Individual Control	Two Thermistor Control	O
	Standard Wired Remote Controller	O
	Deluxe Wired Remote Controller	X
	Simple Wired Remote Controller	X
	Wired Remote Controller(for hotel use)	X
	Wireless Remote Controller(simple)	X
	Wireless LCD Remote Controller	ACCESSORY(PQWRHSF0)
CAC Network Function	General Central Controller(Non LGAP)	X
	Dry Contact	OPTION
	Network Soluation(LGAP)	O
	PDI(Power Distribution Indicator)	X
	PI485	ACCESSORY(PMNFP14A0)
Special Function Kit	Zone Control	X
	CTIE	X
	Electro Thermostat	X
Others	Thermistor	-

#### Note :

O : Applied, X : Not applied, - : No relation

Option: Model name & price are different according to options, and assembled in factory with main unit.

Accessory: Installed at field, ordered and purchased separately by the corresponding model name, supplied with separate package.

Skip over evaporator sensing means that the function of knock-off to prevent freezing is skipped, when IDU start cooling mode.

## Outdoor

Category	Function	LTNH488DLE1
Reliability	Defrost / Deicing	O
	High Pressure Switch	O
	Low Pressure Switch	X
	Phase protection	O
	Restart Delay (3-minutes)	O
	Self Diagnosis	O
	Soft Start	X
	Test Function	O
Convenience	Auto Changeover	O
	Auto Restart Operation	O
CAC Network Function	Central control(LGAP)	O
	PDI(Power Distribution Indicator)	X
	PI485	X
Special Function Kit	Low Ambient Kit	ACCESSORY
Others	Thermistor	-

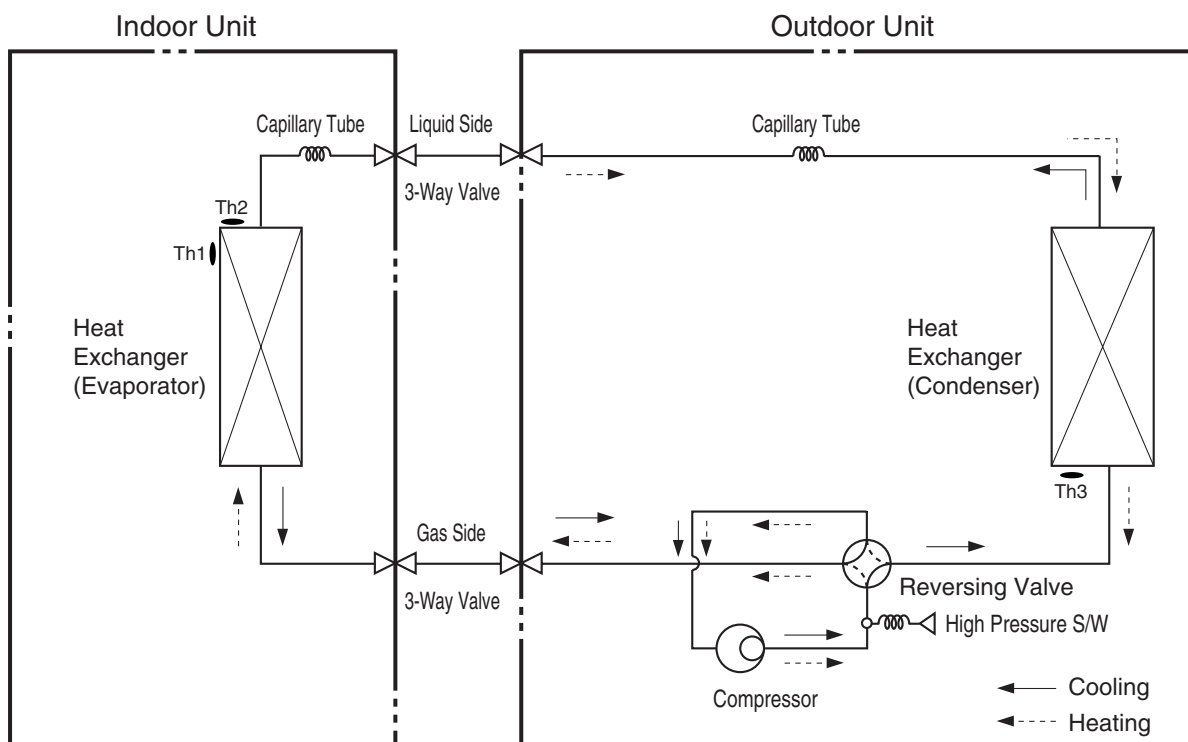
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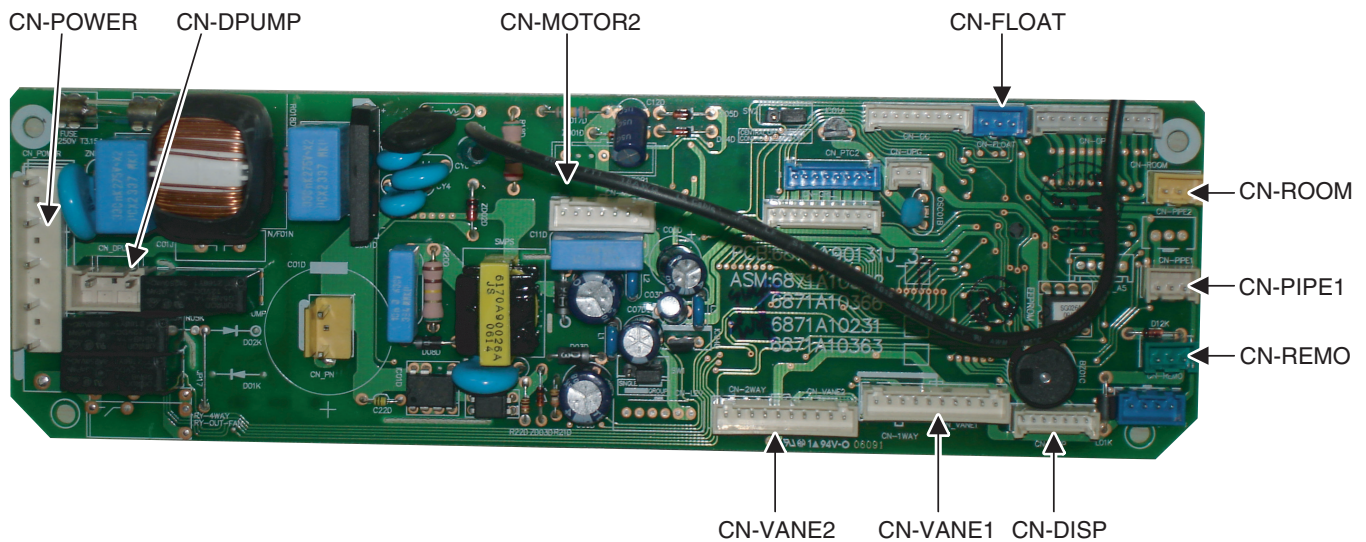
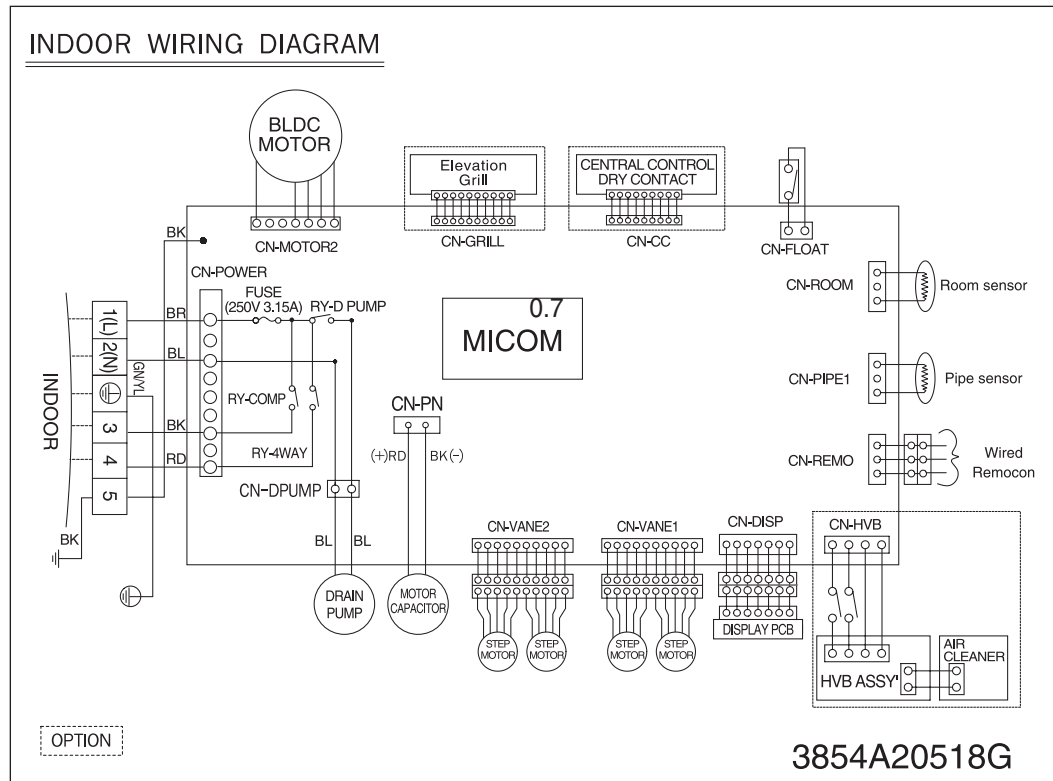
### 3. Piping Diagrams



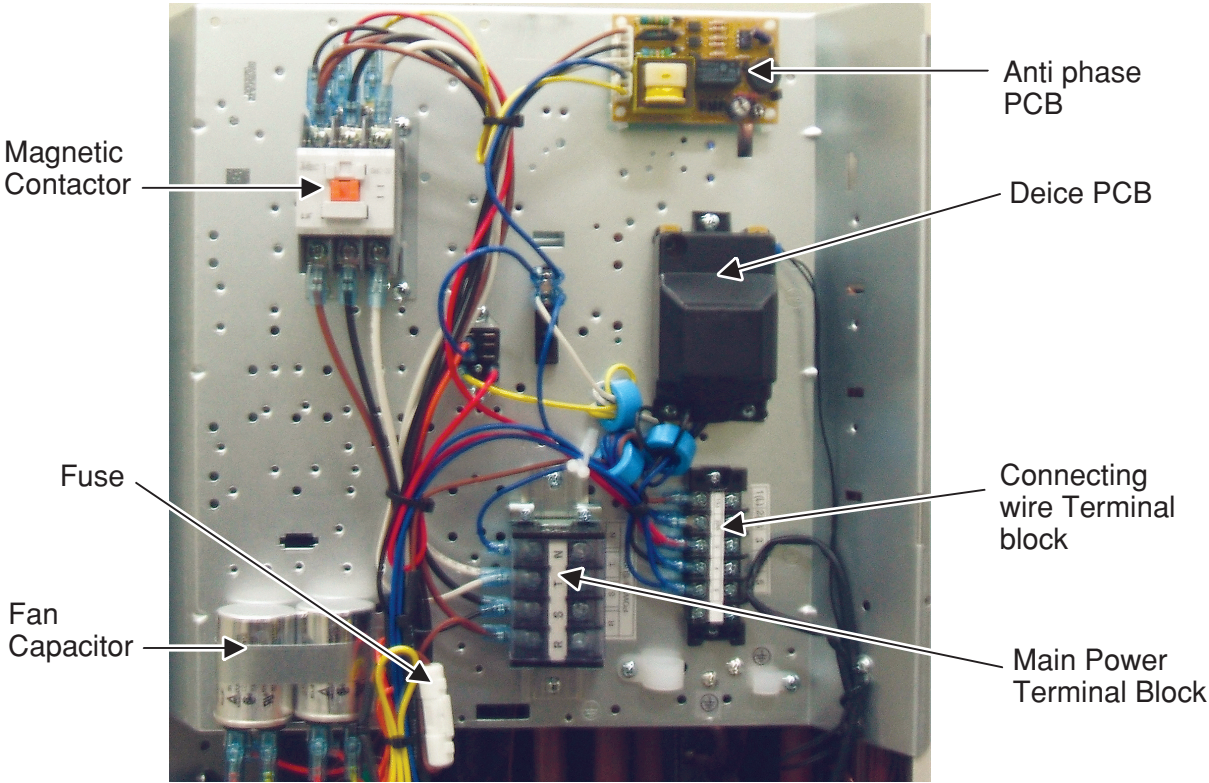
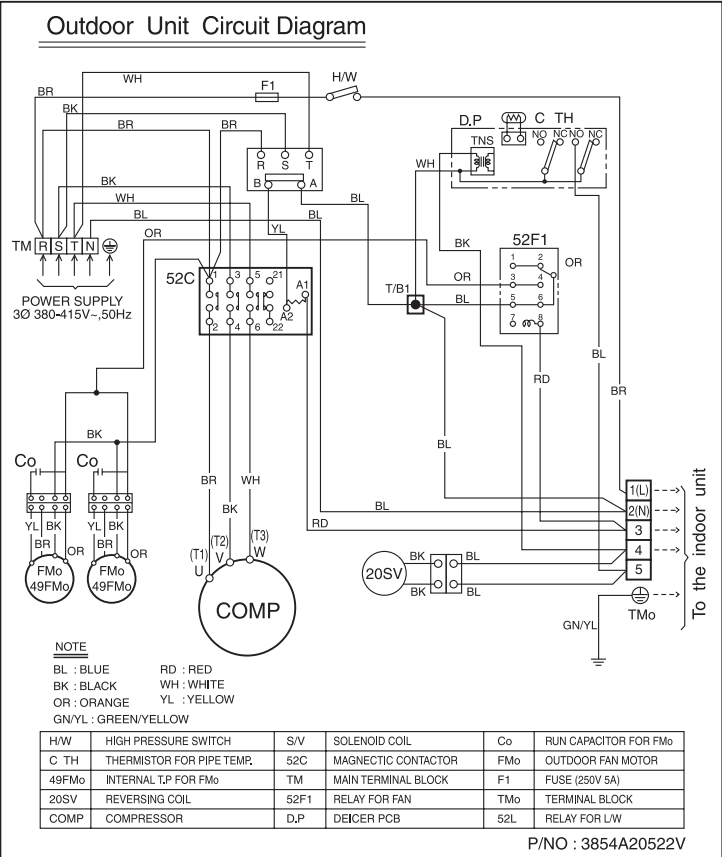
LOC.	Description	PCB Connector
Th1	Thermistor for indoor air temperature	CN_ROOM
Th2	Thermistor for evaporating temperature	CN_PIPE1
Th3	Thermistor for condensing temperature	Deice PCB

## 4. Wiring Diagrams

### Indoor Unit



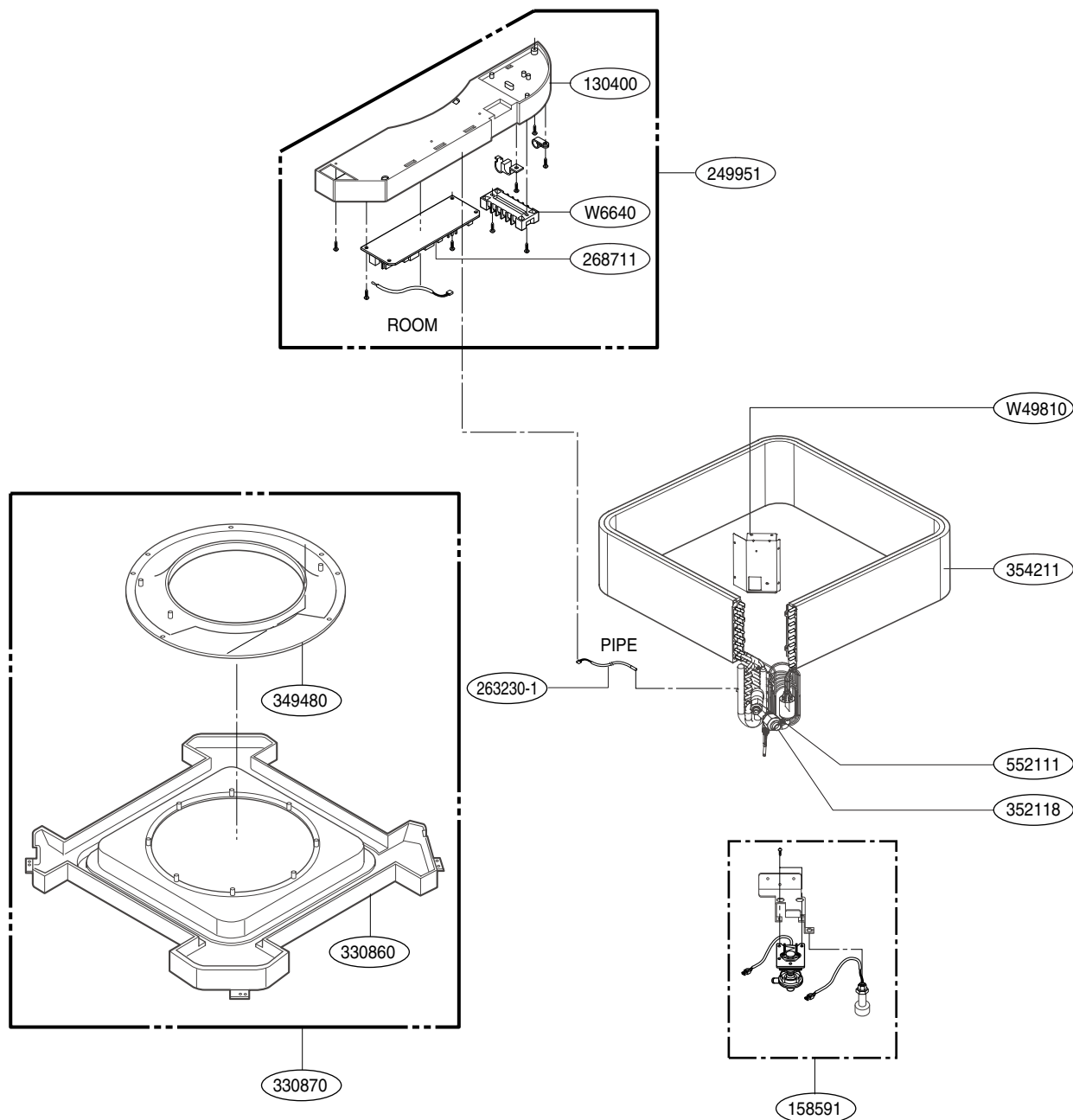
Outdoor Unit





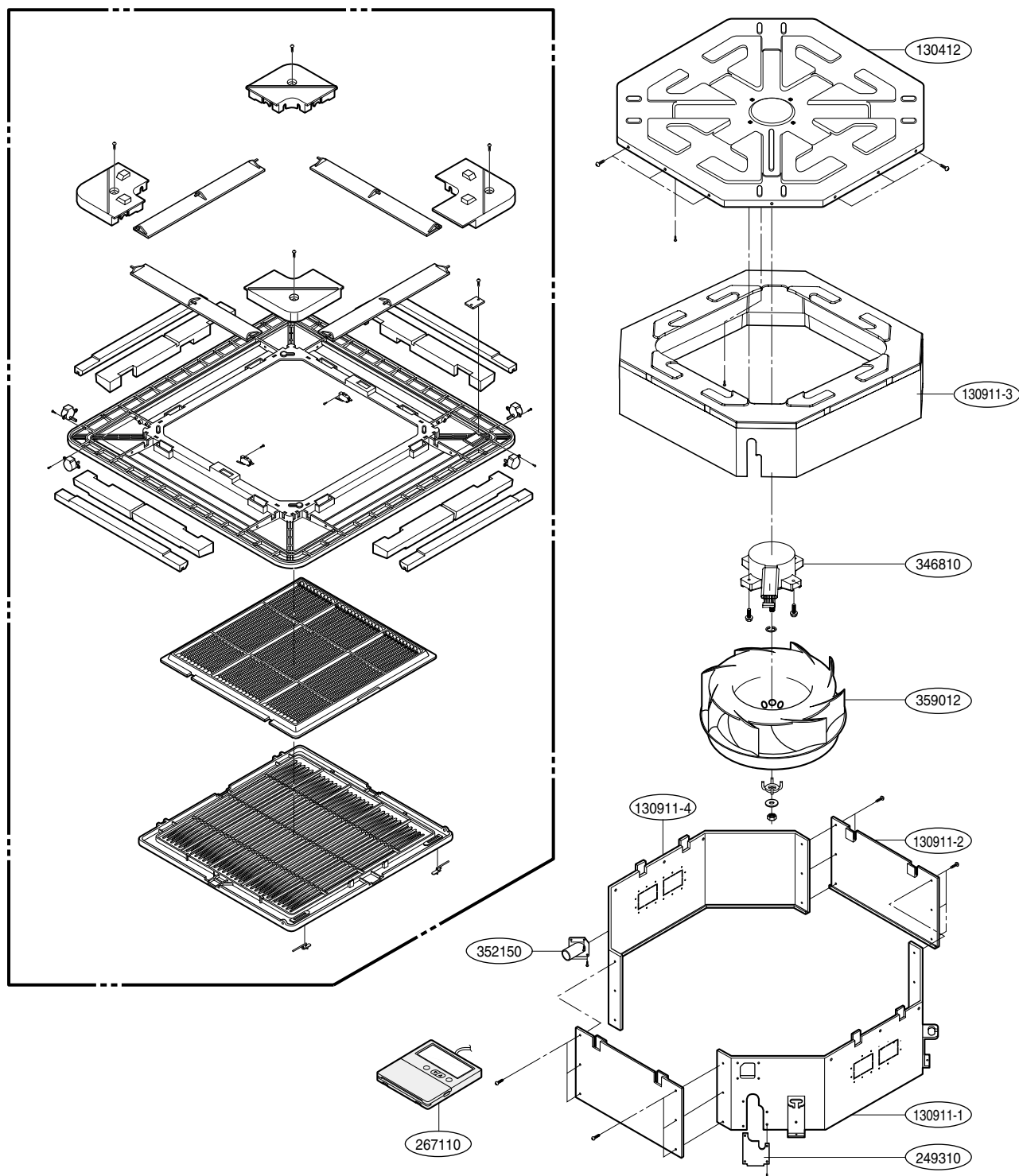
## 5. Exploded View

### Indoor Unit



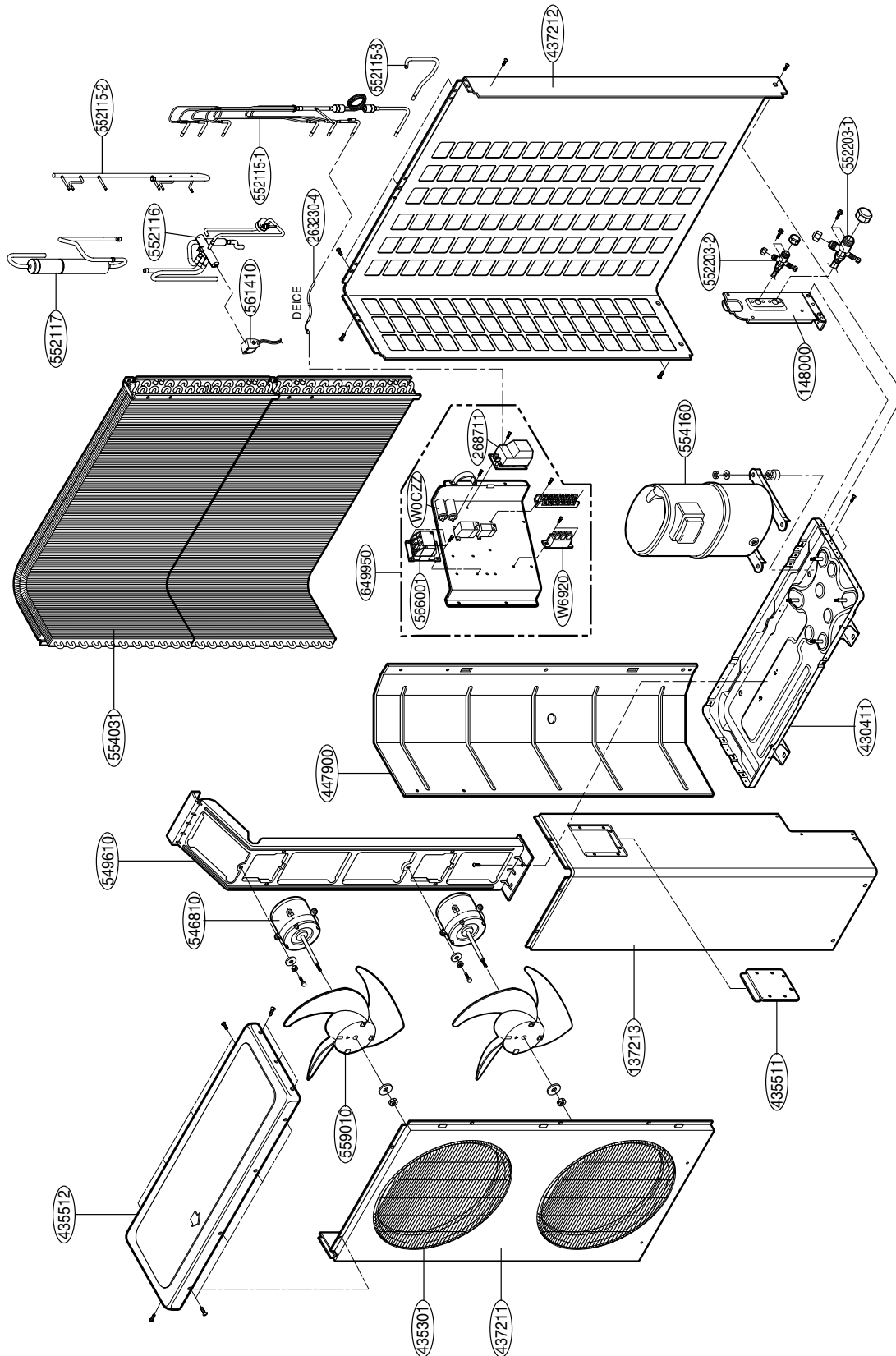
Note) \* Please ensure GCSC since the replacement parts may be changed depending upon the buyer's request.  
Please check the correct parts in View RPL(Replacement Part List) on GCSC.  
(GCSC Website <http://biz.Lgservice.com>,)

Please check the service part of front panel by model name(PT-HDA1)



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## Outdoor Unit



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